

REMARKS

Claim 1-20 were pending in this application.

Claims 21 and 22 have been added.

Claims 1-20 have been rejected.

Claims 1, 2, 4, 5, 7, 10-14, 16 and 19 have been objected to.

Claims 1-5, 7, 10-14, 16 and 19 have been amended as shown above.

Claims 1-22 remain pending in this application.

Reconsideration and full allowance of Claims 1-22 are respectfully requested.

I. OBJECTIONS TO SPECIFICATION

The Office Action objects to the Abstract as being merely a repeat of the independent claims, and therefore, failing to describe the disclosure sufficiently or assist readers. The Applicant respectfully traverses this objection. In MPEP 608.01(b), the following main context requirements for the Abstract are listed: (1) "The Abstract should sufficiently describe the disclosure to assist readers in deciding whether there is a need for consulting the full patent text; and" (2) "The language should be clear and concise and should not repeat information given in the title."

The Applicant notes that nowhere do the Patent Rules nor the MPEP prohibit the language used in the Abstract from being similar to the language used in the claims. In fact, the requirements listed above for Abstracts are similar to the requirements of claims. For example, 37 CFR 1.75(a) requires that the specification conclude "with a claim particularly pointing out and distinctly

claiming the subject matter which the application regards as his invention.” In addition, 37 CFR 1.75(d) requires that the claims “conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support in the description.”

Therefore, if the language of the claims meets the requirements of 37 CFR 1.75(a) and (d), the claim language is considered both clear and concise and sufficiently descriptive of the disclosure to meet the requirements of the Abstract. As a result, the Applicant respectfully submits that the Abstract does meet the requirements of MPEP 608.01(b). Accordingly, the Applicant respectfully requests withdrawal of the objection to the Abstract.

The Office Action objects to the specification, and requests the Applicant to update the information regarding related U.S. Patent Applications on pages 1-2. The Applicant has amended the specification to include the serial numbers of the listed U.S. Patent Applications, all of which are currently pending, except one which has issued, as noted above. Accordingly, the Applicant respectfully requests withdrawal of the objection to pages 1-2 of the specification.

The Office Action objects to the Summary of the Invention as being merely a repeat of claims. 37 CFR 1.73 requires that the Summary of the Invention “be commensurate with the invention as claimed.” Therefore, Applicant respectfully submits that using language similar to claim language in the Summary of the Invention does meet the requirements of MPEP 608.01(d) and 37 CFR 1.73. Accordingly, the Applicant respectfully requests withdrawal of the objection to the Summary of the Invention.

II. OBJECTIONS TO DRAWINGS

The Office Action indicated that page 6 (Figures 6 and 7) was not included with the Formal Drawings submitted on 16 April 2001. Applicant submits herewith a copy of the originally submitted Formal Drawings, along with a copy of the stamped postcard indicating that all pages of drawings were received by the Patent and Trademark Office on 16 April 2001. Accordingly, the Applicant respectfully requests entry of page 6 of the Formal Drawings.

The Office Action objects to the drawings as failing to include the reference numeral 244 mentioned on page 22 in the specification and failing to mention several reference numbers in Figure 3. The Applicant has amended page 22 the specification to make the specification consistent with the drawings. The Applicant respectfully requests withdrawal of these objections.

The Office Action further objects to the drawings as failing to include the reference number for element "Register 63" mentioned on page 24 in the specification. The term "Register 63" as used in the specification refers to a particular register within register file (element 310), as evident by the description on page 23, line 19 - page 24, line 20, and the mention of another register (Register 0). Thus, the term "Register 63" is not referring to a specific element shown in the Figure, but rather is simply providing an example of one of the registers in the register file. Accordingly, the Applicant respectfully requests withdrawal of the objection to the term "Register 63."

III. OBJECTIONS TO CLAIMS

The Office Action objects to Claims 2 and 11 as being of improper dependent form for failing to further limit the subject matter of a previous claim. The Office Action states “[t]he limitation found in claims 1 and 10 ... inherently means that the at least address bit is associated with each syllable found in the instruction bundle, since it is associated with the entire instruction bundle.” The Applicant respectfully notes that it appears that the Examiner is impermissibly reading a limitation into Claims 1 and 10, namely an “inherent” association between the address bit and each syllable. MPEP 2111. 37 CFR 1.75(c) merely requires that a dependent claim “further limit” another claim. The Applicant respectfully submits that a claim reciting an association between at least one address bit and at least one syllable in each instruction bundle does further limit a claim reciting an association between the at least one address bit and each of the instruction bundles. Nothing in Claim 1 recites anything about the relationship between the address bit and one or more of the syllables in the instruction bundles. Accordingly, the Applicant respectfully requests withdrawal of the objection to Claims 2 and 11.

The Office Action further objects to Claims 1, 2, 4, 5, 7, 10-14, 16 and 19 because of various informalities and typographical errors noted in the Office Action. The Applicant has amended Claims 1-5, 7, 10-14, 16 and 19 to correct all instances of the noted informalities. Accordingly, the Applicant respectfully requests withdrawal of the objection.

IV. REJECTIONS UNDER 35 U.S.C. § 112

The Office Action rejects Claims 1, 5, 10 and 14 under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Office Action rejects Claims 1, 5, 10 and 14 as being unclear in their recitation of the letters “C”, “N”, “S” and “L”. The rejection of Claims 1, 5, 10 and 14 is respectfully traversed. MPEP 2173.02 requires a reasonable degree of particularity and distinctness in claim language, and further states that “reasonable” should be determined in light of the specification and what one of ordinary skill in the art would understand.

The Applicant respectfully submits that the letters “C”, “N”, “S” and “L” are reasonable, as these letters are defined in the specification on page 39 and in reference to Figure 8. Furthermore, the Applicant respectfully submits that one of ordinary skill in the art would understand what is meant by the letters “C”, “N”, “S” and “L” in the context of the claims, and considering the remainder of the specification. Accordingly, the Applicant respectfully requests withdrawal of the § 112 rejections of Claims 1, 5, 10, 14 and 19.

The Office Action further rejects Claim 19 under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention due to insufficient antecedent basis for the limitation “the at least one address bit” in line 17. The Applicant has amended Claim 19 to provide proper antecedent basis. Accordingly, the Applicant respectfully requests withdrawal of the § 112 rejection of Claim 19.

V. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 1- 3, 8-12 and 17-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,167,503 to Jouppi ("*Jouppi*") in view of U.S. Patent No. 5,051,940 to Vassiliadis et al. ("*Vassiliadis*"). The Office Action rejects Claims 4-7 and 13-16 under 35 U.S.C. § 103(a) as being unpatentable over *Jouppi* in view of *Vassiliadis* and further in view of U.S. Patent No. 5,560,028 to Sachs et al. ("*Sachs*"). These rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781,

783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

Independent Claims 1, 10 and 19 each recite an instruction execution pipeline “having N processing stages” and being “L lanes wide.” (*See, Figure 8 of the present application and the associated text*). The Office Action acknowledges that *Jouppi* does not disclose, teach or suggest this feature, and cites *Vassiliadis* as teaching such a feature. (*Office Action, Pages 8-9*). Applicant respectfully submits that such a feature is not found in either of the cited references nor can such a feature be found in a combination of the cited references.

The cited passages in *Vassiliadis* recite an instruction execution pipeline that has N processing stages. However, the cited passages of *Vassiliadis* do not teach or suggest that the instruction execution pipeline is “L lanes wide.” The Office Action does not cite *Sachs* as disclosing, teaching or suggesting these features of Claims 1, 10 and 19.

As a result, the Office Action fails to establish a *prima facie* case of obviousness against independent Claims 1, 10 and 19, from which Claims 2-9, 11-18 and 20 depend, respectively.

Accordingly, the Applicant respectfully requests withdrawal of the § 103(a) rejections and full allowance of Claims 1-20

VI. NEW CLAIMS

The Applicant has added new Claims 21 and 22. The Applicant submits that no new matter has been added. The Applicant respectfully requests entry and full allowance of Claims 21 and 22.

VII. CONCLUSION

As a result of the foregoing, the Applicant asserts that all pending claims in the application are in condition for allowance and respectfully requests an early allowance of such claims.

SUMMARY

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208. No extension of time is believed to be necessary. If an extension of time is needed, however, the extension is requested. Please charge the fee for the extension to Deposit Account No. 50-0208.

Respectfully submitted,

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Date: _____

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